## **Article 6: Electrical Regulations**

## **Division 2: Local Additions to the Electrical Regulations**

(Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)

## §146.0201 Purpose of Local Additions to the Electrical Regulations

The purpose of this division is to adopt regulations for electrical installations that provide for local conditions.

(Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)

# §146.0202 Alterations, Additions, Relocations, and Conversions of Existing Wiring

- (a) Additions, extensions, alterations, or removal of existing wiring installations shall be made in compliance with the provisions of this article.
  - (1) Where additions, alterations, or extensions of a wiring installation are proposed in cases where this article requires a metallic wiring method, and the existing installation was lawfully installed according to any other applicable ordinance, code, or order and is not unsafe in the opinion of the Building Official, the existing installation need not be replaced.
  - (2) Existing electrical systems may be used in connection with alterations or repairs if such electrical systems have been properly maintained and were installed in accordance with the applicable laws in effect at the time of installation. Any electrical system shall be deemed to have conformed with applicable law in effect at the time of installation and to have been maintained in good condition if currently in a good and safe condition and working properly.
  - (3) Where the electrical system is upgraded at the owners initiative and the wall covering is not removed, the receptacle spacing requirements of the 1998 California Electrical Code, Article 210, section 52, need not apply.
- (b) Electrical systems in relocated buildings shall comply with the provisions of this article except for the following:

- (1) Each room in a relocated dwelling shall be provided with receptacles spaced so that no point along the floor line in any wall space is more than 10 feet from a receptacle.
- (2) Existing receptacles that are more than 5 feet from a grounded surface need not be of the grounded type.
- (c) In an overhead to underground conversion district, the existing electrical service shall be replaced or repaired if any one of the following conditions exists:
  - (1) When the electrical service equipment is not dead-front operated;
  - (2) When the electrical service equipment is not readily accessible;
  - (3) When the electrical service equipment is not grounded; or
  - (4) When the electrical service equipment is not adequate to carry the actual load.

(Added 12-9-1997 by O-18451 N.S.; amended 12-6-1999 by O-18728 N.S.; effective 1-1-2000.)

#### §146.0203 Materials for Electrical Installations

- (a) All electrical materials, devices, applications, and equipment installed or used, shall be in conformity with the provisions of this article and with approved standards for safety to life and property.
- (b) Listing or labelings, as conforming to the Standards of the Underwriters Laboratories, Inc., Uniform Building Code Standards, or other approved testing laboratories, shall be prima facie evidence of conformity with the approved standards for safety to life and property when such standards are consistent with the method of installation.
- (c) Previously used materials shall not be reused in any work without the written approval obtained in advance from the Building Official.

(Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)

#### **§146.0204** Circuit Cards

A complete schedule of circuits, showing the number and arrangement of outlets on each circuit, shall be posted at the service equipment location prior to request for

rough wiring inspection. Circuit cards furnished by the Planning and Development Review Department shall be used for this purpose. In lieu of a circuit card, an approved wiring plan may be used.

(Added 12-9-1997 by O-18451 N.S.; amended 12-6-1999 by O-18728 N.S.; effective 1-1-2000.)

## **§146.0205** Labeling

- (a) Meter bases shall be labeled by address to identify the occupancy served.
- (b) Meter rooms shall be identified with lettering not less than 2 inches high, or other approved means.

(Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)

## §146.0206 Branch Circuit Overcurrent Protection

- (a) Where plug fuses are in use on remodeled or extended wiring for lighting or convenience plug outlet branch circuits, they shall be replaced with Type "S" (tamper-resistant) fuses.
- (b) Whenever there exists evidence of overfusing or fuse tampering, the Building Official shall require the installation of Type "S" fuses or automatic breakers. (Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)

#### §146.0207 Transformers

- (a) Location of Transformers
  - (1) Transformers installed for the operation of doorbells, chimes, annunciators, and similar devices, when placed in clothes closets or similar locations, shall be placed immediately over the door on the wall or ceiling. They shall be located so that contact with combustible materials cannot be made.
  - (2) Transformers installed for the operation of doorbells, chimes, annunciators, and similar devices, when placed in an attic or beneath a building or structure, shall be located within 2 feet of the opening leading into the attic or beneath a building or structure.

(Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)

#### §146.0208 Use of Nonmetallic Cables

- (a) Nonmetallic cables are approved only for dwelling and residential accessory occupancies not exceeding three floors in height. Dwelling occupancies include hotels, motels, apartment houses, convents, monasteries, lodging houses, and one- and two-family houses. Residential accessory occupancies will neither exceed a total of 1,000 square feet nor exceed 700 square feet of concentrated use assembly areas such as auditoriums, chapels, meeting rooms, exercise rooms, and dance floors. In mixed occupancies (commercial/dwelling) where there is a required firewall separation, the appropriate wiring method may be used on each side of the firewall. Where there is no required firewall, the most restrictive wiring method shall be used throughout the entire building.
- (b) This limitation does not apply to nonmetallic cables installed in accordance with Articles 725, 760, and 800 of the 1998 California Electrical Code. (Added 12-9-1997 by O-18451 N.S.; amended 12-6-1999 by O-18728 N.S.; effective 1-1-2000.)

### §146.0209 Aluminum Conductors and Conduit

- (a) An approved type of inhibitor shall be used on all nonplated stranded aluminum conductor terminations.
- (b) Aluminum conductors installed underground shall be installed in an approved raceway.
- (c) Aluminum grounding conductors where used outdoors or where penetrating the exterior wall shall be factory-\insulated.
- (d) Aluminum conduit, boxes, or fittings shall not be used embedded in earth, concrete, plaster, or within 18 inches of the earth unless the exterior finish of the aluminum conduit, boxes, or fittings is approved for the purposes.

  (Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)

#### §146.0210 Limitation of Residential Current Utilization Outlets

- (a) The number of current consuming outlets on one circuit shall not exceed the following:
  - (1) Four on an appliance circuit.

Fifteen on a lighting circuit. (2) (Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)